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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,739	04/09/2001	Avi J. Ashkenazi	P1468R1D1	1184

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GENENTECH, INC.  
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SOUTH SAN FRANCISCO, CA 94080

EXAMINER

SAUNDERS, DAVID A

ART UNIT	PAPER NUMBER
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1644

DATE MAILED: 07/18/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

828,739

Applicant(s)

ASHKEWAZI et al

Examiner

SAUNDERS

Group Art Unit

1644

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 4/10/03
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1, 3-16, 18-21 is/are pending in the application.
- ☐ Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1, 3-16, 18-21 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
  - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

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The claims pending and under examination are 1, 3-16 and 18-21.

Applicant's amendment of 4/10/03 (paper 6) has overcome the previously stated objection to claim 2 and 101/112 rejection of claim 17.

The following 112 rejections of record (Paper 4) are maintained.

Claims 1-21 are rejected under 112 sixth paragraph.

Since the claims cover no particular DNA sequence but, rather, all DNA sequences, which achieve a particular result, without defining what means will do so these claims are essentially single means claims. *Fiers v. Sugano* 25 USPQ2d 1601.

Claims 1-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicant's claims may all be considered as single means claims.

As such, these claim fail to comply with the enablement requirement of 112, first paragraph. *In re Hyatt* 218 USPQ 195.

Claims 1-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant failed to possess the claimed DNA, vector, host cells and methods of use thereof.

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Applicant's specification has merely shown possession of three hybridoma cell lines that secrete monoclonal antibodies in accord with the nature of the disclosed antibodies. However, with respect to nucleic acids (DNA), applicant has merely reviewed several art known methods of providing such DNA, such as obtaining the encoding DNA from hybridoma cell lines, from phage display libraries, etc. Such methods, however, do not provide a description of its structure (sequence). Specification containing statement that claimed DNA sequence is part of invention and reference to potential method for isolating sequence does not satisfy written description requirement of 35 U.S.C. 112, since specification does not describe DNA itself. *Fiers v. Sugano* 25 USPQ2d 1601.

Applicant's urgings filed in Paper 6 have merely argued that claims 1-21 should not be objected to (The claims were, in fact, rejected under 112, sixth para) because the claims do not have a "means for" format. If the examiner should be in error, then applicant is still referred to *Fiers v. Sugano* at page 1606, col. 2, second full para., where it is stated that such claims to DNA are "analogous to a single means claim" and where the decision of *In re Hyatt* is cited to indicate that the claims are not enabled under the 112, first paragraph rejection stated by the examiner in Paper 4. The same paragraph of *Fiers v. Sugano* also indicates that such claims fail to meet the description requirement.

As to applicant's urgings that applicant has "demonstrated a reduction to practice of the recite antibodies and DNA encoding such antibodies" (Paper 6, page 5), the examiner concurs that the antibodies have been reduced to practice. However the

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DNA, which is claimed, has not been reduced to practice. Where is any DNA sequence encoding the antibodies disclosed? As set forth in *Fiers v. Sugano*, mere teachings of methods of how to isolate and sequence the encoding DNA do not provide for possession/description. Applicant's urgings have failed to address *why* the ~~national~~ set forth in *Fiers v. Sugano* regarding lack of enablement and lack of description under 112, first para. is in error.

Applicant's urgings filed on 4/10/03 have been considered but are unconvincing of patentability.

The following 102 rejections of record (Paper 4) are maintained.

Claims 1-12 and 15-21 are rejected under 35 U.S.C. 102(e) or (g) being entirely anticipated by Ashkenazi (6,342,369).

Ashkenazi is a proper reference under 102(e), since it is to "another" and was filed on May 14, 1998, prior to June 12, 1998 date which applicant claims benefit of in the instant application.

Ashkenazi discloses an antibody (3F11.39.7), which binds to Apo-2 and cross-reacts with DR4. See col. 48, lines 46-62. This antibody blocks apoptosis and also has agonistic activity (col. 31, lines 41-48 and col. 48, lines 36-45).

As to the instant claims to DNA sequences encoding the antibody, vectors and host cells and use thereof, as well as to various types of antibody constructs (e.g. humanized), and conjugates of such antibodies, all of these aspects are taught by Ashkenazi. See especially col. 31, line 5-col. 37, line 8.

Claim 12 is included because the 3F11.39.7 antibody of Ashkenazi has the binding characteristics of the three recited antibodies, in accord with applicant's definition of "cross-reactivity" (para. Spanning pp. 21-22) and Table 2.

Claims 1-12 and 15-21 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. As noted supra, Ashkenazi (6,342,369) has invented the same subject matter.

Applicant has urged that the instant specification (pages 21-22) provides a precise definition of "specifically "cross-reacts", presumably in terms of a percentage reflecting the extent of binding, and that the teaching of Ashkenazi do not show that the 3F11.39.7 antibody has this extent of cross-reactive binding. The examiner considers that the extent of cross-reactive binding may be estimated from the OD readings shown in Fig. 11; in the absence of precise figures, the examiner estimates this extent to be about 25%. Thus a simplistic reading of claim 1, in light of the specification at pages 21-22 would exclude the 3F11.39.7 antibody of Ashkenazi et al.

Applicant's disclosure, however, is not this simplistic. If one looks at Table 2 (page 66) then one notes that antibodies 3H1.18.10 and 343.14.5 show cross reactivities with DR4, DcR1 and DcR2 indicated, in all cases as "+/-". The legend under this table defines "+/-" as indicating "25 – 49% binding". This is below the limit of 50% set forth at pages 21-22, yet applicant considers the 341.18.10 and 343.14.5 antibodies as within the scope of claim 1; otherwise, how can applicant recite these in dependent claims 12-14? Also, if applicant wants to include antibodies having a "+/-" reactivity of 25-49% in Table 2, then the examiner should certainly include the 3F11.39.7 antibody of

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Ashkenazi as within the scope of claim 1 and as "having the biological characteristics" of the antibodies recited in claim 12.

The discrepancy between the percentages of cross-reactive binding set forth at pages 21-22 and in Table 2, invites a 112, second para. rejection; however, the action is made FINAL.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Saunders whose telephone number is (703) 308-3976. The examiner can normally be reached on Monday to Thursday from 8 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (703) 308-3973. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Saunders/LR  
July 7, 2003

*David A. Saunders*  
DAVID SAUNDERS  
PRIMARY EXAMINER  
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